

Sabouraud Chloramphenicol Dextrose Agar

Cat. 1090

For the selective cultivation and isolation of yeasts and molds.

Practical information

Applications	Categories
Selective isolation	Yeasts and molds

Industry: Cosmetics / Clinical / Food



Principles and uses

Sabouraud Chloramphenicol Dextrose Agar is a selective medium that can be used for the cultivation of yeast, molds (as pathogenic fungi, particularly those associated with skin infections) and aciduric microorganisms. This medium is also used for determining the microbial and fungal content of cosmetics and for the mycological evaluation of food.

Dextrose is the fermentable carbohydrate providing carbon and energy. Peptone mixture provides nitrogen, vitamins, minerals and amino acids essential for growth. Bacteriological agar is the solidifying agent. The high dextrose concentration and acidic pH make this medium selective for fungi.

This medium is a modification of the Dextrose Agar described by Sabouraud, with the addition of Chloramphenicol, which inhibits the great majority of bacterial contaminants.

Chloramphenicol is an antibiotic which aids in isolating pathogenic fungi from heavily contaminated material, as it inhibits most contaminating bacteria. It is a recommended antibiotic for use with media due to its heat stability and wide bacterial spectrum.

Formula in g/L

Bacteriological agar	15	Chloramphenicol	0,5
Dextrose	40	Peptone mixture	10

Preparation

Suspend 65,5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Distribute into proper containers and sterilize in autoclave at 118-121 °C for 15 minutes. AVOID OVERHEATING as it facilitates the hydrolysis of the components and the medium remains soft.

Instructions for use

- » For clinical diagnosis, the type of samples are all kind of samples (hair, skin, nails, etc).
If the samples are formed by scrapes of skin, hair or nails, place the material in the center of the surface of the medium.
 - Spread a plate with loop or swab.
 - Incubate in aerobic conditions at 30±2 °C for 18-48 hours and until 7 days if necessary.
 - Reading and interpretation of results.
- » For other uses not covered by the CE marking:
 - Inoculate sample and incubate at 30 °C and observe after 3-7 days if necessary.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber, slightly opalescent	5,6±0,2

Microbiological test

Incubation conditions: (25±1 °C / 5 days).

Inoculation conditions: Productivity quantitative (100±20. Min. 50 CFU).

Reference media: Media batch SDA already validated.

Rest of strains:

Incubation conditions: (30 °C / 3-7 days).

Microrganisms

Aspergillus brasiliensis ATCC 16404
Candida albicans ATCC 2091
Escherichia coli ATCC 25922
Staphylococcus aureus ATCC 25923
Candida tropicalis ATCC 750
Saccharomyces cerevisiae ATCC 9763

Specification

Good growth >70%
Good growth
Inhibited growth
Inhibited growth
Good growth
Good growth >70%

Storage

Temp. Min.:2 °C

Temp. Max.:25 °C

Bibliography

Sabouraud R. 1892. Ann. Dermatol. Syphilol. 3:1061.

Jarett, L., and A.C. Sonnenwirth (ed) 1980. Gradwohl's clinical laboratory methods and diagnosis, 8th ed. CV Mosby.

Curry, A. S., J. G. Graf, and G. N. McEwen, Jr. (ed) 1993. CTFA Microbiology Guidelines. The Cosmetic, Toiletry, and Fragrance Association, Washington, D.C.